

MARINE PARK

Bulletin

Volume 1, Issue 1, May 1998

WORD FROM THE CO-DIRECTORS

have taken advantage of the regional workshop on whale watching activities to present this first issue of the Saguenay-St. Lawrence Marine Park's Information Bulletin. It will help you to understand the Park, its goals and its objectives.

The United Nations has declared 1998 the International Year of the Ocean. This worldwide event will provide an opportunity to focus and strengthen the attention of the general

public, governments and decision-makers in general on the importance of the oceans and the marine environment in their role as resources, with a view to their sustainable use.

The objectives of the year-long commemoration of the ocean are perfectly consistent with those of the Marine Park. The protection and presentation of the Saguenay-St. Lawrence Marine Park are part of a worldwide trend, as populations everywhere become increasingly aware of the need to protect and respect their oceans and coastal regions.

Since time immemorial, human beings have used the tremendous riches of the ocean for subsistence purposes, believing them to be unlimited. Today, however, we know that the marine environment is suffering from the pressure of the human population, through increased pollution, overfishing and the degradation of coastal areas. The oceans play a vital role in maintaining life on our planet, and we, its inhabitants, can

(continued on page 2)

THE PARK IN BRIEF



Eternity Bay

The sea has always played a central role in the history of humanity. The same applies to the St. Lawrence River, which sustained the early nomadic hunters 8,000 years ago, and brought the ships of the European explorers to the new continent. The governments of Quebec and Canada, eager to preserve this rich marine heritage, have combined their efforts to create Quebec's first-ever Marine Park. The Saguenay-St. Lawrence Marine Park, covering an area of some 1,138 square kilometres, protects and presents a section of this unique environment for the benefit of present and future generations.

The Marine Park is an area in which the riches of our natural environment are preserved, protected and presented to the public. In this perspective, it shares the basic objectives of land-based parks. However, the area it covers, an open system, is composed solely of water, and its boundaries stretch as far as the high seas. The concern of the Marine Park's management is therefore not only to protect the marine ecosystems and

ensure the well-being of their inhabitants, but also to ensure the well-being of river-side residents, who have always enjoyed a close relationship with the sea.

The main objective of the Marine Park is to conserve the wealth of this rich and complex ecosystem. One unusual feature of the Park is that, although its main field of action is the sea, its management practices

SUMMARY

The Park in Brief

1-5

The Regional Workshop
on Whale Watching
Activities at Sea

3

Whales under
Observation

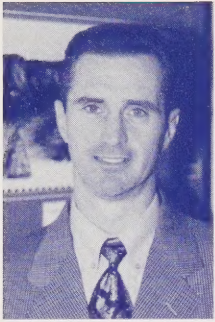
6

Activities for Everyone

8



Saguenay-St. Lawrence
MARINE PARK



Michel Boivin
Interim Joint
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Environnement
et Faune Québec

change our lifestyle habits in order to restore and maintain their health.

It is here that the notion of marine park is so significant, especially when we associate it with the planet-wide network of more than 1,400 marine conservation areas.

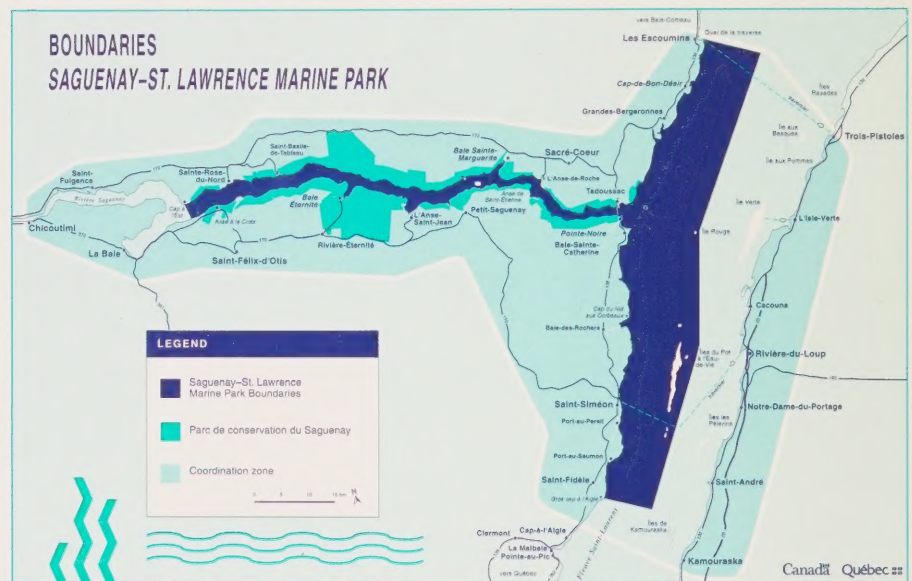
A marine park is much more than a tourist development project. In fact, it is first and foremost an area that we have decided collectively to protect, so that visitors can appreciate its riches, and so that it can be passed on to future generations in the best possible state. The Saguenay–St. Lawrence Marine Park is unique in that its participatory management approach requires input from the regional population in order to achieve the conservation and development objectives of a marine environment that is unlike any other in the world.

We invite you to read the Bulletin and to contact us with any comments or questions you may have.

must necessarily involve the communities living along its shores. It is for this reason that the Saguenay–St. Lawrence Marine Park has established a coordination area that encompasses the municipalities from the four neighbouring regions. This approach will allow all the region's citizens to play an active role in the Park's conservation, education and development efforts. It also bears witness to the Park management's firm desire to work in partnership with the region's communities. The Marine Park is everyone's business.

The theme of the Marine Park is "a crossroads of life, and a source of exchange

and wealth". Oceanographical phenomena and the movement of the water caused by the ascent of cold water at the point where the Saguenay River joins the St. Lawrence Estuary combine to create conditions favorable to the abundance of life present in the Marine Park. The many fish and marine bird species that live in the area, as well as the different whale and seal species, find an exceptional source of the food they need to survive. Every year, the fin whales, blue whales and mink whales attract large numbers of visitors who are increasingly sensitive to the well-being of these giant mammals.



FIVE OBJECTIVES

The Saguenay–St. Lawrence Marine Park's management plan, the fruit of public consultations, presents the approach selected by Heritage Canada and Québec's Ministère de l'Environnement et de la Faune to ensure that this showcase of Canada's heritage is preserved, protected and presented to the public. The plan gives the Park's main development focus, and includes five objectives:

- Conservation of the ecosystems through integrated natural resource management;
- Education and interpretation on the different facets of the Marine Park;
- Promotion of scientific research, in order to obtain more knowledge of the ecosystems and how they function;
- Use of the area according to ecological, environmental, social, cultural and ethical considerations;
- Harmonious integration of regional, governmental and local activities, compatible with the objectives of the Marine Park.

(continued on p. 4)

A MEETING FOR THE FUTURE

On May 25 and 26 1998 the regional workshop on marine mammal observation will be held at the Tadoussac Hotel. The event will provide an excellent opportunity for everyone concerned to meet and discuss the actions required to protect marine mammals and ensure that marine mammal observation, an economic activity of considerable importance in the region, can be sustained. The general public is also invited on May 25, from 7:00 p.m. onwards, to listen to and meet with speakers who will talk about different aspects of whale watching, the importance of this sector of regional tourist activity, scientific research carried out in the Saguenay-St. Lawrence Marine Park, and consultations with boat owners, captains, naturalists and interest groups.

The regional workshop is an important step in the joint action process begun in 1997 by the Marine Park, with the cooperation of everyone concerned. The main goal of this process is to protect the marine mammals while allowing marine observation activities to continue in the long term. As part of the process, the main players involved in observation activities were consulted, in order to establish their concerns and identify the actions required to ensure that their activities are adequately structured. The results of the consultations with boat owners and interest groups show that the time has come to review the way whale watching activities are done. Marine tourism has existed for many years, due to the region's great natural beauty and its proximity to large urban centres. On the other hand, it is only

since 1985 that its popularity has exploded. In recent years, a large number of observation boats has been present in the region, generating concerns about the protection of the whales, the safety of passengers, and the public image of this activity itself.

From a world perspective, it has become clear that the whale watching industry in the Marine Park region is the largest of the 65 countries offering this type of activity. In view of the fact that the Marine Park is devoted to education and the conservation of this exceptional environment, it is vital that attention be given to the quality of the experience offered to visitors. Whale watching activities with a concern for quality and environmental protection constitute an

excellent means of discovering the marine world. We must work together to ensure that visitors enjoy an exceptional and unforgettable experience that they will wish to repeat in the future.

All the discussions on May 26 will be devoted to this collective challenge. What must be done to ensure that the whale cruises in the Marine Park are the best in the world, and to ensure that visitors go home happy with an unforgettable experience and having develop-

ed a greater respect for the marine environment? The challenge is a stimulating one, and one that participants will be keen to take up. Representatives of the tourist industry, interest groups, the federal and provincial governments and the municipal and regional authorities will sit down together at the same table to discuss the steps required to ensure that the activities are properly structured.

The ultimate objective of the workshop is to bring together people from the communities and authorities responsible, so that they can work together to protect the future of an economic activity that is important for the Marine Park region, while protecting the resources and ensuring that the services offered are of the highest quality. It will be a meeting for the future!

Observation
of fin whales

The popularity of whale
watching activities began to
explode in 1985.

A Short History

It was in 1990 that the federal and provincial governments signed an agreement to create the Saguenay–St. Lawrence Marine Park, the first of its kind in Quebec. It was also the first time the two governments had joined forces to create a park.

In 1990, the two governments held public hearings to establish the boundaries of the Park's territory. The consultations led, among other things, to a doubling of the Park's surface area, as the territory was extended to cover a large part of the St. Lawrence

Parks Canada/F. Di Domenico



THE PARK'S TERRITORIAL BOUNDARIES

The Saguenay–St. Lawrence Marine Park covers the entire section of the Saguenay River bed located downstream from Cap à l'Est, together with the northern half of the St. Lawrence Estuary, from Gros Cap à l'Aigle upstream to Pointe-Rouge (Les Escoumins) downstream. The Park is bounded by the ordinary high water mark, excluding floods or overflow.

The following are not included in the Park:

- all properties not held by the Quebec government;
- all marine infrastructures (wharves, marinas, the lighthouse on the Prince shoal) and a 25-metre strip around all marine infrastructures without water lots and in deep water—i.e., lots on the Saguenay and St. Lawrence River beds;
- all islands and islets.

Estuary. At the same time, the governments formed an advisory committee composed of representatives of the regional county municipalities affected by the project, the scientific community, the *Union québécoise pour la conservation de la nature* and the *Coalition pour le parc marin du Saguenay-Saint-Laurent*. The Essipit Montagnais band council also informed the government of its point of view concerning the management and development of the Park. Thanks to this innovative approach based on joint action, the issues at stake and the interests of the population were identified and subsequently considered in the creation of the Park.

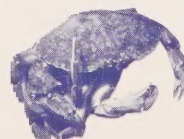
In April 1993, the two governments launched a public consultation on the development proposal. In the course of the process, 63 briefs were submitted, providing clear evidence of the interest generated by the project. The Park administration included the community's recommendations in its management plan, which was made public in February 1996. The plan explains the mission of the Saguenay–St. Lawrence Marine Park and states its main objectives as well as its main development orientations.

The federal and provincial Acts creating the Marine Park were adopted in 1997, and will be promulgated at the same time in the summer of 1998. The Acts recognize the existence of a unique participatory management structure known as the Coordinating Committee (see box).

The Saguenay–St. Lawrence Marine Park is therefore the outcome of a long process in which the governments opted for an innovative approach based on joint action by local and regional bodies. Their intention in doing so was to develop the riches of an exceptional region in order to satisfy the expectations of large numbers of visitors while protecting the marine resources for generations to come.

THE PARK IN FIGURES

- A surface area of 1,138 square kilometres.
- In places, the waters of the Saguenay River are 276 metres deep.
- The cold salt water from the Atlantic Ocean flows gradually up the Laurentian channel, an immense underwater valley more than 1,000 km long, and surfaces near the Saguenay confluence, creating the marine conditions found in the region¹.
- The Saguenay contains some 59 fish species² and more than 410 bottom-dwelling invertebrates³.
- The rocks forming the fjord cliffs, up to 450 metres high in places, and the north shore of the St. Lawrence River are part of the Canadian Shield, and are between 600 million and 4 billion years old.



The Marine Park Coordination Committee

A Unique Participatory Management Approach

The Coordination Committee, given legitimate standing by the Acts constituting the Marine Park, is composed of representatives from the four regions making up the coordination area, as well as from the conservation community, the research community, the Essipit Montagnais Band Council and the two levels of government.

The Coordinating Committee enables the parties to work together and harmonize their action to avoid duplication. It makes recommendations to

the Ministers responsible for the Marine Park concerning the strategies and methods required to achieve the objectives of the management plan. It also intervenes in the fields of marine resource protection, education and interpretation, visitor reception and guidance, development, marketing promotion and scientific research.

The Coordination Committee has formed advisory committees in the Park's main fields of operation. The role of these committees is to analyse prob-

lems and projects proposed by the community, and to make recommendations to the Coordination Committee. The first meeting of the Coordination Committee was held in February 1996, and the Committee adopted its first action plan in 1997. It has established its own operating rules, and its members work as a group—in other words, they always seek a consensus when formulating recommendations to the Ministers responsible for the Marine Park.

Save the Belugas

Thanks to new and more accurate survey methods, the beluga population has been estimated at 700 animals⁴. Unfortunately, there has been no reliable indication of an increase in this number since hunting was prohibited in the early 1970s. Pollution of the St. Lawrence River undoubtedly contributes to the poor quality of life of the St. Lawrence beluga, which in recent years has rightly become a world symbol of threatened wildlife. In fact, the beluga is considered to be "a population in danger of extinction" by the Committee on the Status of Endangered Wildlife in Canada. It is particularly vulnerable to the slightest ecological disaster, such as an oil spillage.

It is in this perspective that Fisheries and Oceans Canada and the World Wildlife Fund (Canada) have asked a group of independent experts to develop a restoration plan for the St. Lawrence beluga population. This effort is in addition to federal and provincial initiatives to guarantee the survival of the beluga,



Parks Canada/F. Guay

in particular those undertaken in 1988 with the Five-Year St. Lawrence Action Plan, and later with the St. Lawrence Vision 2000 plan.

The restoration plan, tabled in December 1995, provides for a series of strategies that a number of companies and bodies are invited to apply in order to help the belugas. More specifically, the group opted for five strategies:

- reducing all toxic contaminants in the St. Lawrence ecosystem that may have a negative effect on the belugas;
- reducing disturbances caused by human activities in areas frequented by the belugas;
- preventing ecological disasters and taking the necessary emergency measures;

- monitoring the state of the population;
- examining other possible obstacles to the recovery of the beluga population.

In the coming months, a monitoring committee will submit its first report on the situation prevailing since recovery plan activities began. Based on this first review, priority actions will be established in order to give the St. Lawrence belugas the best possible chance of survival.

WHALES UNDER OBSERVATION

Parks Canada/Jean Audet

You may perhaps have noticed them in recent years. They leave port in rubber dinghies, early in the morning. They climb on board observation ships, clipboards, pencils and stopwatches at the ready. Sometimes they park their cars along the shore, and spend the night listening to the sea. They are, of course, the small team of researchers from the Marine Environment Research and Education Group, known by its French acronym GREMM.

The GREMM researchers, led by Robert Michaud, first turned their attention to the belugas and whales living at the confluence of the Saguenay and St. Lawrence Rivers more than ten years ago. Since the Park was created, these most passionate of whale watchers have worked closely with the Park's staff to try to penetrate the mysteries of the marine mammals' lives. The task is far from easy, because as we all know, the whales spend most of their time underwater, regularly diving to depths in excess of 100 metres to find their favourite foods—krill or caplin, whichever is the most abundant.

Why this interest in the whales? Simply to gain a better understanding of their behaviour and to ensure that the observation activities do not constitute a threat to the animals. The issue is an important one for the survival of both the whales and the industry. In fact, researchers throughout the world have been trying to answer a fundamental question since the whale watching industry came into existence, whether in Tadoussac, Vancouver Island or on the

east coast of the United States. The question is this: do the observation ships disturb the whales to such an extent that their survival is at risk?

WWAS and VHF

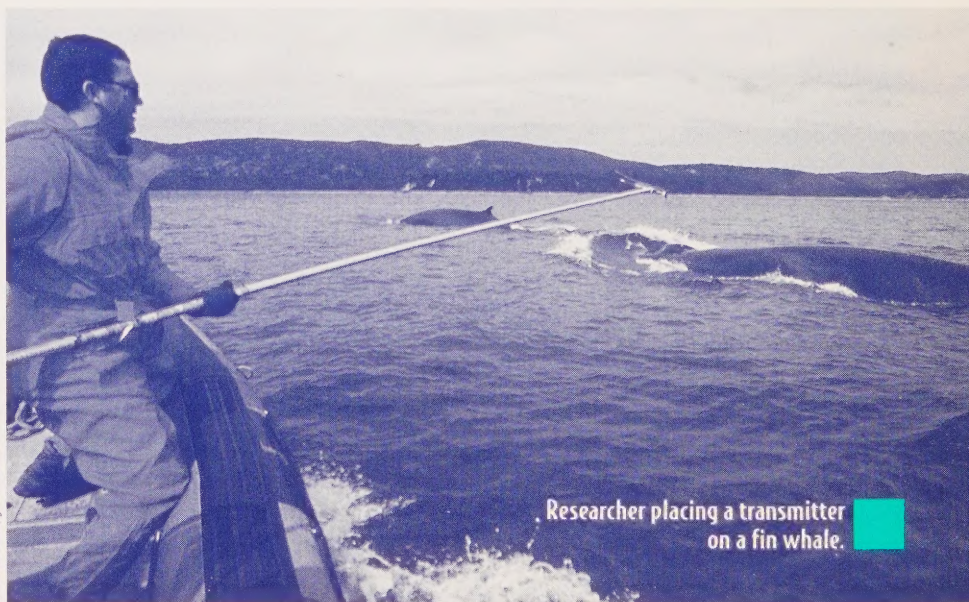
To understand whale behaviour in more detail, and to see how the boats might influence it, scientists have carried out two principal research projects in the Marine Park. The first, entitled "Whale Watching Activities at Sea" (WWAS)⁵, consisted in gathering as much information as possible on the number of boats and their use of the territory. The boat owners, concerned about the future of their industry, cooperated closely by allowing the biologists to sail aboard their boats. As a result, the researchers were able to obtain an accurate description of the number and type of boats involved, their positions, the time

WHALE DAY

The results of the VHF⁶ telemetric monitoring show that the daily activities of a fin whale can be divided into three main groups, separated by transitional phases.

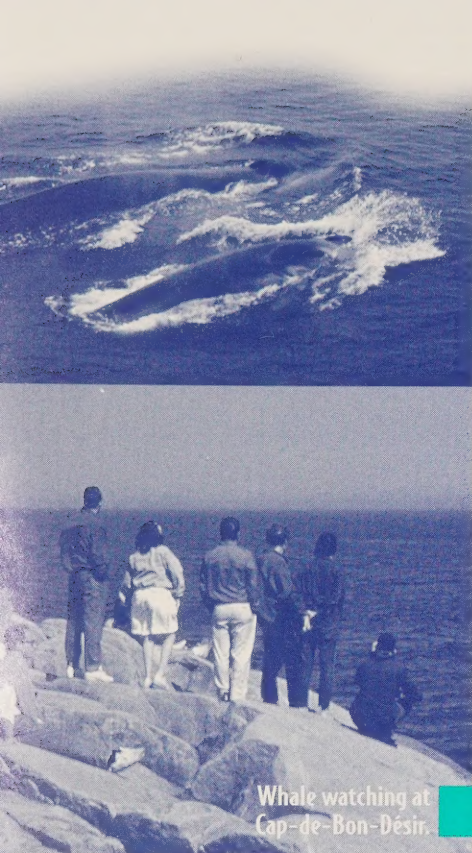
During the night, the whale makes several shallow dives. Early in the morning, it makes a series of different forms of dives. These are exploratory activities that the animal generally performs alone. It is looking for a source of food.

During the day, until around the end of the afternoon, the whales come together as a group to feed. They make u-shaped dives to depths of between 90 and 100 metres. This is the type of dive that is affected most by the presence of too many boats.



Researcher placing a transmitter
on a fin whale.

Parks Canada/Jean Audet



Parks Canada/Daniel Rosset

Parks Canada/J. Beaudet

Whale watching at Cap-de-Bon-Désir.

devoted to observing and locating the whales, the number of animals observed, and other elements. All the data collected have been entered into a computer, and can now be used to draw an accurate picture of what actually happens at sea.

A second project carried out by the GREMM in cooperation with the Marine Park and Fisheries and Oceans Canada, consisted in monitoring a number of whales by plotting their movements to gain a better understanding of their behaviour. To do this, the scientists placed measuring devices equipped with VHF transmitters on the backs of the whales. The device recorded the depth and duration of the animal's dives and transmitted the data to a micro-computer on board a ship whenever the animal surfaced to breathe.

In this way, the researchers were able to gather an impressive amount of information on the whales' habits. It was the first time ever that a team of researchers anywhere in the world was able to estab-

lish a detailed record of the daily habits of fin whales (see box). The data show that the whales are disturbed by the presence of too many boats. In fact, the more boats there are, the less time they spend taking their breath. Because they surface less frequently to breathe, they cannot spend as much time feeding as they would need. In other words, it is possible that the whales become less efficient at feeding themselves.

However, it is impossible to say with any degree of certainty whether or not the disturbance will have medium and long-term effects on the health of the whales or on their habit of coming to the region to feed. The whale feeding area in the Marine Park is so rich and interesting that the animals may have no choice but to stay, despite the presence of too many boats. The potential effects on their health, reproduction capacity and life expectancy could only become apparent in a few years' time, and the situation may well be critical by then.

Do the observation boats disturb the whales to a point that their survival is threatened?

In the short term, however, field research in the Marine Park will allow the authorities to take steps to avoid situations that would be harmful not only to the fin whales in the estuary, but also to the whale watching industry. Industry players will take advantage of the workshop on May 25 and 26 to discuss possible measures. It is first and foremost a question of common sense.

International Year of the Ocean 1998



The International Year of the Ocean is already under way, and we are currently witnessing a tidal wave of worldwide action to promote the protection of the marine environment. It is an excellent opportunity for everyone—governments and individuals alike—to pull together and become aware of the health of our oceans, in order to do what is needed to preserve their viability. In this perspective, the Saguenay–St. Lawrence Marine Park will organize activities to commemorate the International Year of the Ocean. It is up to you to take part.

A torrent of information on the International Year of the Ocean is available. Anchors away!
<http://www.ocean98.org/>
<http://www.oceanscanada.com/>
<http://www.nos.noaa.gov/events/oceanyear.html>
<http://www.unesco.org/ioc/iyo/iyo-home.htm>
<http://www.expo98.gc.ca>

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Activities for Everyone!

The area adjacent to the Saguenay–St. Lawrence Marine Park boasts several interpretation centres and observation sites where visitors can appreciate the many different facets of this fascinating universe. Worthy of note among these numerous attractions are the following three centres:

- **Pointe-Noire Interpretation and Observation Centre:** a natural outcrop offering visitors a splendid view of the Saguenay fjord and providing an excellent vantage point from which to observe oceanographical phenomena. Watchful visitors will be pleasantly surprised by the passing presence of marine mammals, including the minke whale and beluga, which are often observed here. The Centre offers a number of activities and services, including interpretation activities, a panoramic trail, a picnic area and a boutique. Open from June 15 to October 12. Opening hours vary. (418) 237-4383.
- **Cap-de-Bon-Désir Interpretation and Observation Centre:** an exceptional point along the shore from which to observe the marine estuary and different marine mammal species, including the minke whale, fin whale, beluga, blue whale, grey seal and harp seal. The Centre offers its visitors educational activities, hikes along the coastline, a picnic area and a boutique. Open from June 15 to October 12. Opening hours vary. (418) 232-6751.

- **Saguenay Fjord Interpretation Centre:** Located in Eternity Bay, the Centre offers a brand new interactive exhibition this year, together with interpretation activities, hiking trails, cruises on the fjord, a picnic area and a souvenir kiosk. Open from May 29 to October 12. Opening hours vary. (418) 272-2267.

These government interpretation centres form part of a developing discovery network. The Marine Park's management and local communities are presently working to expand the network. Other educational and leisure sites will be added, to allow visitors to enjoy the natural and cultural resources of the Park. For example, six reception and orientation counters are currently being established, with the mission of welcoming visitors and helping them plan their stay in the park. The first counter is expected to open this year, at Les Escoumins.

The development and protection of the Marine Park depend on the dynamism of the players involved, and on the cultural and natural features of the surrounding communities. The Saguenay–St. Lawrence Marine Park is an extremely popular destination, and it is therefore vital that all its activities and services are offered in a way that is respectful of its mandate. In this International Year of the Ocean, we hope visitors will enjoy their voyage of discovery through this wonderful marine environment.

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